

IN THE CLAIMS

1. (canceled)

2. (currently amended) A method of screening for therapeutic agents useful in the treatment of a cardiovascular disease in a mammal, comprising steps of:

- i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
- ii) determining the activity of said polypeptide at a different concentration of said test compound; and
- iii) identifying said test compound as a potential therapeutic agent useful in the treatment of the cardiovascular disease.

3-26. (canceled)

27. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease selected from the group consisting of ~~peripheral nervous system diseases;~~ cancer, gastroenterological diseases; endocrinological diseases; and urological diseases in a mammal, comprising steps of

- i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
- ii) determining the activity of said polypeptide at a different concentration of said test compound; and
- iii) identifying said test compound as a potential therapeutic agent useful in the treatment of the disease.

28. (currently amended) A method of screening for therapeutic agents useful in the treatment of ~~a central nervous system disorder selected from the group consisting of brain~~

~~injuries, cerebrovascular diseases and their consequences, motor neuron disease, dementia, ALS, multiple sclerosis, traumatic brain injury, stroke, post-stroke sequelae, posttraumatic brain injury, small vessel cerebrovascular disease, Alzheimer's disease, vascular dementia, dementia with Lewy bodies, frontotemporal dementias, Pick's disease, progressive nuclear palsy, thalamic degeneration, Creutzfeld-Jakob dementia, HIV dementia, schizophrenia with dementia, Korsakoff's psychosis, and pain,~~ comprising steps of

- i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
- ii) determining the activity of said polypeptide at a different concentration of said test compound; and
- iii) identifying said test compound as a potential therapeutic agent useful in the treatment of the disease.